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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,966

11/14/2003

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EXAMINER

MURRAY, DANIEL C

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,966

Applicant(s)

ROTHENHOFER, KARL

Examiner

Daniel Murray

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2143

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14NOV2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14NOV2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 14NOV2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/706966, filed on 14NOV2003.

Information Disclosure Statement

2. The information disclosure statement submitted on 14NOV2003 has been considered by the Examiner and made of record in the application.

Drawings

3. The drawings are objected to because:
 - figures 1, 2, and 3 lack descriptive block labels.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR

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1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because

- Abstract uses claim language, e.g. line 6 "said" before "stream service"

Correction is required. See MPEP § 608.01(b).

7. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact.

The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph.

Examples of some unclear, inexact or verbose terms used in the specification are:

- page 3 paragraph 1 lines 10-12, replace ",", with --- in "0,4 %", "1,25 ms", and "1,25 ms"
- page 6 paragraph 6 lines 4, replace "2" with --1-- before "shows three sub-networks"
- page 7 paragraph 2 line 2, replace "network" with --terminal-- before "31"
- page 9 paragraph 4 line 1, replace "ore" with --or-- before "more"

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- page 9 paragraph 5 line 3, replace “send” with --sends--
- page 11 paragraph 3 line 7, replace “gateway” with --frame-- before 81
- page 12 paragraph 1 line 2, replace “83” with --84-- before “comprises”.
- page 14 paragraph 3 lines 4, replace “theses” with --this-- before “control”
- page 14 paragraph 4, consider replacing “in the following described by hand of” with --described in the following in regards to”
- page 14 paragraph 5 line 6, replace “914” with --911-- before “performs”
- page 15 paragraph 3 lines 5-6, replace “take” with --make-- (line 5), replace “tariff” with --traffic-- (line 6)
- page 16 paragraph 2 line 4, replace “byte” with --bytes-- after 100
- page 16 paragraph 2 line 5, replace “,” with --- in “1,25 ms”
- page 16 paragraph 2 line 8, replace “,” with --- in “0,4 %”, replace “dealy” with --delay-- before “of the second”, replace “,” with --- in “1,25 ms”
- page 16 paragraph 2 line 9, replace “,” with --- in “0,4 %”

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

9. **Claim 2, 3, and 10** objected to because of the following informalities:

a) On line 3 of claim 2, replace "a" with --an-- before "unpacketization"

b) On line 2 of claim 3, replace "the" with --a-- before "transmission" in order to provide proper antecedent basis for "transmission period"

c) On line 2 of claim 3, replace "a" with --the-- before "stream" in order to provide proper antecedent basis for "stream service emulation tunnel"

d) On line 2 of claim 10, delete "characterized in that the method"

Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. **Claims 6-8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of

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the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, **claim 6** recites the broad recitation “adapted to receive stream data”, and the claim also recites “adapted to receive E1 frames containing stream data” which is the narrower statement of the range/limitation. For purposes of applying Prior Art, the Examiner interprets claim 6, as “the first communication unit is adapted to receive E1 frames containing stream data from a circuit switched network.”

Claims 7 and 8 are also rejected by virtue of their dependency on claim 6.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. **Claims 1-4 and 6-10** are rejected under 35 U.S.C. 102(e) as being anticipated by **Ho et al.** (US Patent Publication # US 2003/0133461 A1).

a) Consider **claim 1 and 10**, Ho et al. clearly show and disclose, a gateway (interworking function) and method for transporting stream traffic (voice, digitized voice...) over an IP network (figure 1, abstract, paragraph [0004], paragraph [0022], paragraph [0023], paragraph [0025]), wherein the gateway comprising: a first communication unit for receiving stream data assigned to different

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stream data channels (figure 1, abstract, paragraph [0025]); an allocation unit for allocating two or more stream data channels to a stream service emulation tunnel provided by IP packets periodically transmitted over the IP network (paragraph [0025], paragraph [0035], paragraph [0043]); and a packetization unit for packing the stream data of the allocated two or more stream data channels in IP packets assigned to the stream service emulation tunnel and for periodically sending these IP packets over the IP network (paragraph [0025]), wherein such IP packets contain stream data of two or more different stream data channels (figure 3, abstract, paragraph [0011]).

b) Consider **claim 2**, and as applied to **claim 1** above, Ho et al. clearly show and disclose, the gateway according to claim 1, characterized in that the gateway further comprising: a second communication unit for receiving IP packets associated to at least one stream service emulation tunnel; and a unpacketization unit for allocating stream data transported by such IP packets to two or more stream data channels (figure 1, abstract, paragraph [0025]).

c) Consider **claim 3**, and as applied to **claim 1** above, Ho et al. clearly show and disclose, the gateway according to claim 1, characterized in that the packetization unit is arranged to change the transmission period of IP packets assigned to a stream service emulation tunnel dynamically (figure 6, paragraph [0055], paragraph [0056]).

d) Consider **claim 4**, and as applied to **claim 1** above, Ho et al. clearly show and disclose, the gateway according to claim 1, characterized in that the gateway further comprising a tunnel control unit for dynamically establishing and releasing of stream service emulation tunnels (figure 2, paragraph [0025], paragraph [0033], paragraph [0034]).

e) Consider **claim 6**, and as applied to **claim 1** above, Ho et al. clearly show and disclose, the gateway according to claim 1, characterized in that the first communication unit is adapted to receive stream data from a circuit switched network, in particular is adapted to receive E1 frames

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containing stream data (where constant bit rate circuits (CBRs) can represent any number of data sources/traffic having any number of signaling rates (E1) and are coupled to the IP network through the IWF)(figure 1, paragraph [0022], paragraph [0023], paragraph [0024]).

f) Consider **claim 7**, and as **applied to claim 6 above**, Ho et al. clearly show and disclose, the gateway according to claim 6, characterized in that the gateway is a VoIP Gateway (constant bit rate data, such as voice, over an IP network via a gateway)(abstract, paragraph [0022], paragraph [0023], paragraph [0025]).

g) Consider **claim 8**, and as **applied to claim 6 above**, Ho et al clearly show and disclose, the gateway according to claim 6, characterized in that the gateway is an exchange of a circuit switched network (the IWF is capable of both sending and receiving voice data and thus could function as an exchange in a circuit switched network)(figure 1, abstract, paragraph [0023], paragraph [0024], paragraph [0025]).

h) Consider **claim 9**, and as **applied to claim 1 above**, Ho et al. clearly show and disclose, the gateway according to claim 1, characterized in that the first communication unit is adapted to receive stream data over IP terminals (figure 1, abstract, paragraph [0023], paragraph [0025], paragraph [0033]).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ho et al. (US Patent Publication # US 2003/0133461 A1)** in view of **Singh et al. (US patent Publication # US 2003/0088698 A1)**.

a) Consider **claim 5**, and as applied to **claim 1** above, Ho et al. clearly shows and discloses, the gateway according to claim 1. However Ho et al. does not specifically mention a tunnel control unit for dynamically changing the stream channel allocation scheme used for the allocation of stream data channels to stream service emulation tunnels.

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Singh et al. clearly show and disclose a gateway 140 includes a tunnel control unit (320 330 and 340) for dynamically changing the channel allocation scheme used for allocation of data channels to tunnels (figure 3, figure 5b, paragraph [0060]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Singh et al. into the system of Ho et al. for the purpose of dynamically allocating data channels. Such a feature would have made the overall system of Ho et al. more efficient by allowing specific data channels as well as tunnels to be dynamically allocated.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Zhang et al. (US Patent Pub # 2002/0010938 A1) disclose: "Resource Allocation in Multi-Stream IP Network for Optimized Quality of Service"
- Levi et al. (US Patent # US 6,763,374 B1) disclose: "Active Stream Format for Holding Multiple Media Streams"
- Gazit, Hillel (US Patent Pub # 20030026276 A1) discloses: Method for Multiplexing Data for Packet Networks"


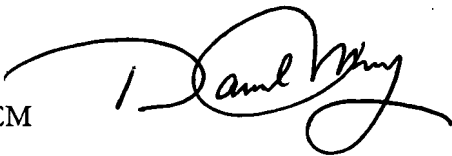
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Murray whose telephone number is (571)-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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